



PATENT ABSTRACTS OF JAPAN

(11) Publication number: **08004562 A**(43) Date of publication of application: **09.01.1996**(51) Int. Cl. **F02D 19/10**

F02B 19/02, F02B 19/14, F02D 19/06, F02M 21/02

(21) Application number: **06158178**(22) Date of filing: **17.06.1994**(71) Applicant: **ISUZU CERAMICS****KENKYUSHO:KK**(72) Inventor: **NAKAJIMA TAKERO**(54) **MULTI-FUEL ENGINE**

(57) Abstract:

PURPOSE: To perform switching of the fuel feed of natural gas or liquid fuel, to perform drive by using gas fuel during ordinary operation, and to perform drive by using liquid fuel during emergency operation.

CONSTITUTION: Main and auxiliary chambers 1 and 2 are intercommunicated through a communication hole 9 and the auxiliary chamber 2 and a gas chamber 6 are intercommunicated through a communication hole 7. A gas introduction port 26 is opened and closed by a gas fuel feed valve 5, and a through-hole 7 is opened and closed by an auxiliary control valve 4. A fuel injection nozzle 3 through which liquid fuel is fed to the auxiliary chamber is arranged in the auxiliary chamber. A controller 10 brings the fuel injection nozzle 3 into non-operation during ordinary operation and causes opening and closing of an auxiliary chamber control valve 4 and the gas fuel feed valve 5 to

drive an engine by using gas fuel, and maintains the auxiliary chamber control valve 4 and the gas fuel feed valve 5 in a closed state during emergency operation and controls drive of an engine through injection of liquid fuel to the auxiliary chamber 2 through the fuel injection nozzle 3.

COPYRIGHT: (C)1996,JPO

